

PATENT

App. Ser. No.: 10/757,781
Atty. Dkt. No. ROC920030348US1
PS Ref. No.: IBMK30348

REMARKS

This is intended as a full and complete response to the Office Action dated February 23, 2006, having a shortened statutory period for response set to expire on May 23, 2006. Please reconsider the claims pending in the application for reasons discussed below.

In the specification, the abstract has been amended to correct minor editorial problems.

Claims 1-20 are pending in the application. Claims 1-20 remain pending following entry of this response.

Claim Rejections - 35 U.S.C. § 103

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arkin et al. (U.S. Patent Number 5,951,705) in view of Kumar (U.S. Patent Number 6,282,134).

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the third criteria.

For example, the prior art references do not teach at least the claim 1 and claim 12 limitation of "dynamic test parameters indicating a change in test parameters corresponding to the subsequent test sequence relative to the current set of test parameters" or the claim 10 and claim 15 limitation of "dynamic test parameters indicating a change in test parameters relative to a previous test sequence."

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The Examiner argues that *Kumar* discloses these claim limitations in the abstract, which states:

A nonvolatile memory device has a signature code generator generating a present signature code from an algorithm modified dynamically as a function of predefined varying parameters. A variable parameter may be the address of a memory cell being addressed; in this case the output of the code generator is a function of data read from the cell array, the previously calculated signature code and the address of the read data. The data are read in sequence, using an internal clock generated by an internal clock oscillator. In test mode, the memory is scanned sequentially, beginning from any memory location, selected randomly, and the signature code varies in dynamic way; at the end of memory scanning, the signature code is compared to an expected result. (*Kumar*, abstract).

While, the abstract generally describes the *Kumar* invention, it does not disclose the above mentioned claim limitations. Furthermore, nowhere in the abstract of the *Kumar* patent nor anywhere else in the *Kumar* patent is the use of "dynamic test parameters indicating a change in test parameters relative to a previous test sequence" described.

Kumar is directed to solving the problem of ensuring error detection during testing of a memory device. (*Kumar*, Column: 2, Lines: 52-55). The methodology used to test memory devices in *Kumar* is to send a test command from a tester device to a memory device to initiate a test of the internal circuitry of the memory device. In *Kumar*, the tester sends a "starting address" to the memory device to initiate the testing of the memory device. (*Kumar*, Column: 5, Lines: 17-20). The memory device then scans the memory arrays within the device. (*Kumar*, Column: 5, Lines: 33-36). Next, the memory device then calculates a signature using a compression algorithm and the results of the memory scan, and returns the signature to the tester device. (*Kumar*, Column: 5, Lines: 40-42). In the tester the signature is then compared to an expected signature value to determine if the device encountered errors during the test. (*Kumar*, Column: 5, Lines:

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45). While the compression algorithm used in *Kumar* to generate a signature may be changed dynamically as a function of varying parameters to prevent error masking, *Kumar* does not disclose “dynamic test parameters indicating a change in test parameters relative to a previous test sequence.”

Furthermore, in *Kumar* there is no teaching of any parameters which indicate “a change in test parameters relative to a previous test sequence” as claimed. *Kumar* only discusses a single test pattern being sent from the tester to the memory device. (*Kumar*, Column: 5, Lines: 17-20). *Kumar* does not disclose a second test parameter, a dynamic test parameter, a previous test sequence, a subsequent test sequence, or any relation between test parameters or test sequences for that matter. Therefore, *Kumar* does not disclose the claim 1 and claim 12 limitation of “dynamic test parameters indicating a change in test parameters corresponding to the subsequent test sequence relative to the current set of test parameters” or the claim 10 and claim 15 limitation of “dynamic test parameters indicating a change in test parameters relative to a previous test sequence.”

Therefore, claims 1, 10, 12 and 15 and their dependents are believed to be allowable, and allowance of the claims is respectfully requested.

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Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted, and



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